

## SEQUENCE LISTING

&lt;110&gt; National Research Council of Canada

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Taylor, David C  
Wei, Yangdou  
Jako, Colette C

&lt;120&gt; Diacylglycerol Acyl Transferase Gene from Plants

&lt;130&gt; 43922

&lt;140&gt; US 09/623,514

&lt;141&gt; 2000-10-03

&lt;150&gt; PCT/CA99/01202

&lt;151&gt; 1999-12-16

&lt;150&gt; US 60/112,812

&lt;151&gt; 1998-12-17

&lt;160&gt; 25

&lt;170&gt; PatentIn Ver. 2.1

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 ttcaaagcaa agggggnttn cctggggnta aagntccang ggcccttggg gcccanccaa 540  
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 <212> PRT  
 <213> Arabidops thaliana

<400> 7  
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<210> 8  
 <211> 341  
 <212> PRT  
 <213> Brassica napus

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 65 70 75 80  
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 85 90 95  
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 100 105 110  
 Pro Thr Leu Cys Tyr Gln Pro Ser Tyr Pro Arg Ser Pro Cys Ile Arg  
 115 120 125  
 Lys Gly Trp Val Ala Arg Gln Phe Ala Lys Leu Val Ile Phe Thr Gly  
 130 135 140  
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 145 150 155 160  
 Ser Lys His Pro Leu Lys Gly Asp Leu Leu Tyr Ala Ile Glu Arg Val  
 165 170 175  
 Leu Lys Leu Ser Val Pro Asn Leu Tyr Val Trp Leu Cys Met Phe Tyr  
 180 185 190  
 Cys Phe Phe His Leu Trp Leu Asn Ile Leu Ala Glu Leu Leu Cys Phe  
 195 200 205  
 Gly Asp Arg Glu Phe Tyr Lys Asp Trp Trp Asn Ala Lys Ser Val Gly  
 210 215 220  
 Asp Tyr Trp Arg Met Trp Asn Met Pro Val His Lys Trp Met Val Arg  
 225 230 235 240  
 His Val Tyr Phe Pro Cys Leu Arg Ile Lys Ile Pro Lys Val Pro Ala  
 245 250 255  
 Ile Ile Ile Ala Phe Leu Val Ser Ala Val Phe His Glu Leu Cys Ile  
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 275 280 285  
 Phe Gln Val Pro Leu Val Phe Ile Thr Asn Phe Leu Gln Glu Arg Phe  
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 Gly Ser Met Val Gly Asn Met Ile Phe Gly Ser Ala Ser Cys Ile Phe  
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 Gly Gln Pro Met Cys Gly Leu Leu Tyr Tyr His Asp Leu Met Asn Arg  
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 Lys Gly Ser Met Ser

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<211> 503
<212> PRT
<213> Brassica napus
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50 55 60  
Ala Gln Gly Thr Ala Asn Leu Ala Gly Gly Asp Ala Glu Thr Arg Glu  
65 70 75 80  
Ser Ala Gly Gly Asp Val Arg Phe Thr Tyr Arg Pro Ser Val Pro Ala  
85 90 95  
His Arg Arg Thr Arg Glu Ser Pro Leu Ser Ser Asp Ala Ile Phe Lys  
100 105 110  
Gln Ser His Ala Gly Leu Phe Asn Leu Cys Val Val Val Leu Val Ala  
115 120 125  
Val Asn Ser Arg Leu Ile Ile Glu Asn Leu Met Lys Tyr Gly Trp Leu  
130 135 140  
Ile Arg Thr Asp Phe Trp Phe Ser Ser Thr Ser Leu Arg Asp Trp Pro  
145 150 155 160  
Leu Phe Met Cys Cys Leu Ser Leu Ser Val Phe Pro Leu Ala Ala Phe  
165 170 175  
Thr Val Glu Lys Met Val Leu Gln Lys Phe Ile Ser Glu Pro Val Ala  
180 185 190  
Ile Ile Leu His Val Ile Ile Thr Met Thr Glu Val Leu Tyr Pro Val  
195 200 205  
Tyr Val Thr Leu Arg Cys Asp Ser Ala Phe Leu Ser Gly Val Thr Leu  
210 215 220  
Met Leu Leu Thr Cys Ile Val Trp Leu Lys Leu Val Ser Tyr Ala His  
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<213> Arabidopsis thaliana

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<223> Xaa is any amino acid
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<212> PRT
<213> Arabidopsis thaliana
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<213> Artificial Sequence
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24

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<213> Artificial Sequence
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<400> 13

23

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<223> Description of Artificial Sequence: Primer DGAT1

24

<220>  
<223> Description of Artificial Sequence: Primer DGAT2

24

<220>  
<223> Description of Artificial Sequence: Primer DGAT3

21

<220>  
<223> Description of Artificial Sequence: Primer DGAT4

25

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24

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<223> Description of Artificial Sequence: Primer B

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24

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer C

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21

<210> 21  
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<223> Description of Artificial Sequence: Primer Gen 1

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33

<210> 22  
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<220>  
<223> Description of Artificial Sequence: Primer Gen 2

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33

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<211> 1985  
<212> DNA  
<213> Arabidopsis thaliana

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&lt;210&gt; 24

&lt;211&gt; 5339

&lt;212&gt; DNA

<213> *Arabidopsis thaliana*

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&lt;210&gt; 25

&lt;211&gt; 547

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis thaliana

&lt;400&gt; 25

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 35 40 45

Pro Ser Asp Asp Val Gly Ala Pro Ala Asp Val Arg Asp Arg Ile Asp  
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Ser Val Val Asn Asp Asp Ala Gln Gly Thr Ala Asn Leu Ala Gly Asp  
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Asn Asn Gly Gly Gly Asp Asn Asn Gly Gly Gly Arg Gly Gly Gly Glu  
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Gly Arg Gly Asn Ala Asp Ala Thr Phe Thr Tyr Arg Pro Ser Val Pro  
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Ala His Arg Arg Ala Arg Glu Ser Pro Leu Ser Ser Asp Ala Ile Phe  
 115 120 125

Lys Gln Ser His Ala Gly Leu Phe Asn Leu Cys Val Val Val Leu Ile  
 130 135 140

Ala Val Asn Ser Arg Leu Ile Ile Glu Asn Leu Met Lys Ser His Ala  
 145 150 155 160

Gly Leu Phe Asn Leu Cys Val Val Val Leu Ile Ala Val Asn Ser Arg  
 165 170 175

Leu Ile Ile Glu Asn Leu Met Lys Tyr Gly Trp Leu Ile Arg Thr Asp  
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Phe Trp Phe Ser Ser Arg Ser Leu Arg Asp Trp Pro Leu Phe Met Cys  
 195 200 205

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 275 280 285  
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 Val Pro Leu Val Phe Ile Thr Asn Tyr Leu Gln Glu Arg Phe Gly Ser  
 500 505 510  
 Thr Val Gly Asn Met Ile Phe Trp Phe Ile Phe Cys Ile Phe Gly Gln  
 515 520 525

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Pro Met Cys Val Leu Leu Tyr Tyr His Asp Leu Met Asn Arg Lys Gly  
 530 535 540

Ser Met Ser  
 545

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